

State of California
Business, Transportation and Housing Agency
Department of Transportation

HIGHWAY FINANCIAL MATTERS
Allocations for Supplemental Funds
Resolution: FA-01-08

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CTC Meeting: April 3-4, 2002

Reference No.: 2.5e

Original Signed by
ROBERT L. GARCIA
Chief Financial Officer
April 1, 2002

ALLOCATION FOR ADDITIONAL FUNDS
FOR PREVIOUSLY APPROVED PROJECTS

RESOLUTION FA-01-08

RECOMMENDATION

The Department recommends that the California Transportation Commission (Commission) approve the following Resolution.

FINANCIAL RESOLUTION

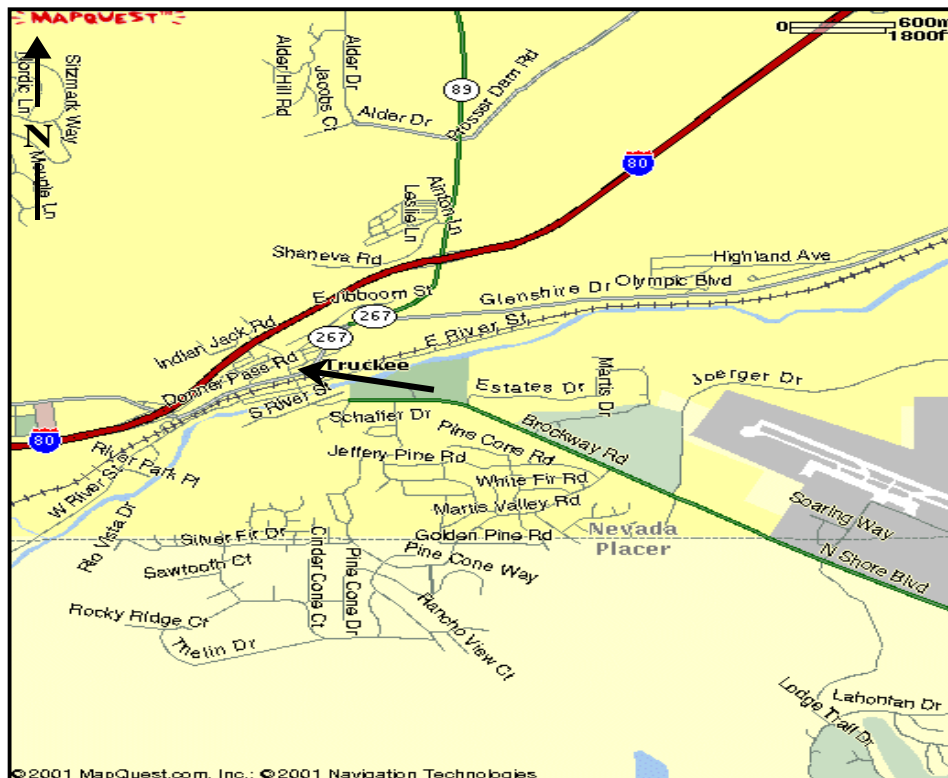
Resolved that \$31,558,000 be allocated from Budget Act Items 2660-301-0042 and 2660-301-0890 of the Budget Act of 2000 and 2001 to provide additional funds for the projects on the attached sheet.

SUMMARY AND CONCLUSIONS

This resolution allocates \$31,558,000 of additional State and Federal funds for four (4) previously approved projects listed below:

<u>Project</u>	<u>Dist-Co-Rte</u>	<u>Original Vote/G11 Amount</u>	<u>Award Amount</u>	<u>Current Budget Amount</u>	<u>Current Allocation Revision</u>	<u>Revised Budget Amount</u>	<u>Total Increase Vote/Award</u>
1	03-Nev-267	\$300,000		\$405,000	\$155,000	\$560,000	87% V
2	04-Ala-80	\$363,000		\$363,000	\$150,000	\$513,000	41% V
3	04-Ala-260	\$21,873,000	\$21,630,000	\$23,634,500	\$22,000,000	\$45,634,500	111% A
4	04-Ala-260	\$27,137,000		\$27,137,000	\$9,253,000	\$36,390,000	34% V

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description Reason for Supplemental Funds	EA PPNO Budget Year Item # Prgm Codes Program	State Federal Current Budget Amount	State Federal Additional Allocation	State Federal Revised Total Amount
2.5e Supplemental Funds for Previously Voted Projects			Resolution: FA-01-08		
1 \$155,000 Department of Transportation Nevada 03N-Nev-267 0.87	In the City of Truckee, at the Union Pacific Railroad grade crossing. Install two warning devices with track circuitry. Supplemental funds are needed for ongoing project.	1A3601 Minor 1997/98 301-0042 301-0890 20.20.201.310 SHOPP	\$40,500 \$364,500		\$40,500 \$364,500
		2001/02 301-0042 301-0890 20.20.201.310 SHOPP		\$16,000 \$139,000	\$16,000 \$139,000
			\$405,000	\$155,000	\$560,000



PROJECT DESCRIPTION

This project is on Route 267 in Nevada County, in the City of Truckee, at the Union Pacific Railroad (UPRR) grade crossing. The project installs two warning devices (consisting of cross bars and lights - type CPUC No. 9A) with necessary track circuitry.

FUNDING STATUS

The project received its original allocation of \$300,000 from the Minor A program in December 1997. In August 1999, additional funds of \$105,000 were allocated per the Department's authority under Resolution G-12. This request of \$155,000 results in an overall increase of 86% over the original allocation for this project. Currently the project costs incurred by the UPRR exceed the existing allocation.

BACKGROUND

The project installs two warning devices consisting of cross bars and lights with the necessary track circuitry to regulate traffic flow. The work is done under service contract with the UPRR Company.

REASON FOR INCREASE

Following the initial allocation, the UPRR Company proceeded with the design of the project. The cost increase is to provide heaters for all the switches within the crossing control circuits to prevent freezing. There was also additional signal circuitry required for safe operation of trains entering the crossing area and to caution approaching motorists. All of this work required additional traffic handling, which was not budgeted in the original estimate.

FUNDING OPTIONS

OPTION A: Approve this request as presented above for \$155,000 to reimburse the UPRR Company for work that has been performed and allow the completion of all work.

OPTION B: Deny this request and direct the Department to contest the billings for work performed.

The Department considered this option. Denial of this request will force the UPRR Company to pursue legal action

RECOMMENDED OPTION

The Department recommends that this request for \$155,000, as presented in Option A above, be approved to allow this project to be advertised.

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description Reason for Supplemental Funds	EA PPNO Budget Year Item # Prgm Codes Program	State Federal Current Budget Amount	State Federal Additional Allocation	State Federal Revised Total Amount
2 \$150,000 Department of Transportation Alameda 04N-Ala-80	In Albany, Alameda County, north of the Buchanan Street Interchange and is bounded on the south by Washington Avenue, on the east by Pierce Street and on the west by Cleveland Avenue, with a total area of approximately 4.5 acres. Grading for mitigation project.	181641 0067N 2000/01 301-0042 301-0890 20.20.075.451 GFRIP	\$31,000 \$332,000 \$363,000	\$13,000 \$137,000 \$150,000	\$44,000 \$469,000 \$513,000
Supplemental funds are needed to advertise project.					



PROJECT DESCRIPTION

This mitigation project is located along Route 80 in the City of Albany, Alameda County, north of Buchanan Street Interchange, and is bounded on the south by Washington Avenue, on the east by Pierce Street and on the west by Cleveland Avenue, with a total area of approximately 4.5 acres.

FUNDING STATUS

The project was programmed in the 2000 STIP, using Grandfather RIP funds, with \$363,000 for construction in the 2001/02 Fiscal Year. The Commission allocated \$363,000 in June 2001. While this request for \$150,000 would result in a 41% increase over the original Commission allocation for this project, the cost estimate for the project has not changed. Originally, the additional \$150,000 was expected to come from another local source, but now the Alameda Congestion Management Agency (CMA) is requesting it be funded from their RIP share.

BACKGROUND

This is Phase I of a cooperative mitigation project. It will construct a community park in two phases as part of the mitigation for the community impacts from construction of the Route 80 High Occupancy Vehicle (HOV) lanes. In Phase I, the Department will prepare a leveled plateau using the dimensions and slopes on the City of Albany's plans. In Phase II, the City will acquire the site and construct the final improvements as part of their adopted Capital Improvement Plan.

REASON FOR INCREASE

While this request for \$150,000 would result in a 41% increase over the original Commission allocation for this project, the cost estimate for the project has not increased. Originally, the additional \$150,000 was expected to come from another local source, but now the Alameda Congestion Management Agency (CMA) is requesting it be funded from their RIP share. Because this is really a change in funding source that increases the base allocation charge to County Shares for this project, it is requested that the normal Resolution G-12 adjustment capacity be maintained.

FUNDING OPTIONS

OPTION A: Approve this request as presented above for \$150,000 to allow this project to be advertised.

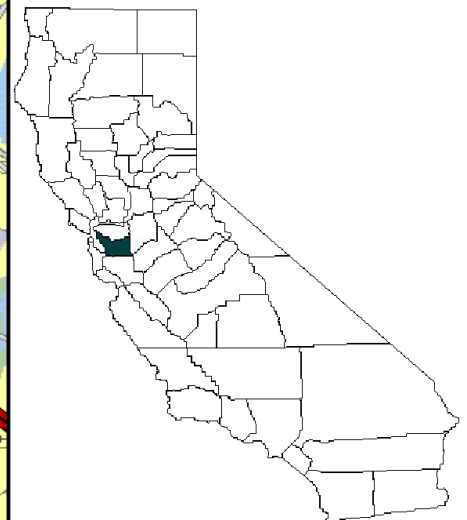
OPTION B: Deny this request and direct the Department to redesign the project for advertisement.

The Department considered these options. Analysis of the situation determined the project as submitted provides the most cost-effective solution for the construction of this mitigation project.

RECOMMENDED OPTION

The Department recommends that this request for \$150,000, as presented in Option A above, be approved to allow this project to be advertised.

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description Reason for Supplemental Funds	EA PPNO Budget Year Item # Prgm Codes Program	State Federal Current Budget Amount	State Federal Additional Allocation	State Federal Revised Total Amount
3 \$22,000,000 Department of Transportation Alameda 04N-Ala-260	In Alameda and Oakland at Webster Street Tube and Posey Tube (Stage I). Construct seismic retrofit and radio rebroadcast system. Supplemental funds are needed for ongoing project.	4401U1 Prior Years 301-0042 301-0890 SHOPP 2001/02 301-0042 301-0890 20.20.201.110 SHOPP 2001/02 301-0042 301-0890 20.20.201.310 SHOPP	\$2,719,500 \$20,915,000 \$23,634,500	 \$2,398,000 \$18,502,000 \$127,000 \$973,000 \$22,000,000	\$2,719,500 \$20,915,000 \$2,398,000 \$18,502,000 \$127,000 \$973,000 \$45,634,500



PROJECT DESCRIPTION

The project is located in Alameda County, in Alameda and Oakland, at the Webster Street Tube and Posey Tube. The project will seismically retrofit the Posey and Webster Street Tubes, a radio-rebroadcast system will also be installed. This project is Stage I and the first of three contracts needed to complete the seismic retrofit of the tubes.

FUNDING STATUS

The project was programmed in the 1998 SHOPP for \$20,800,000 for construction in the 1998/99 Fiscal Year. The Commission voted \$21,873,000 in June 1999. The project was awarded for \$21,630,000 in February 2000. Pursuant to the Department's authority under Resolution G-12, \$358,500 was transferred from this project's budget to the Demonstration Project (EA: 04-440131) in June 2000, and \$2,363,000 was allocated to this project in October 2001, to fund unanticipated work related to the tube joints. The project's current allocation is \$23,634,500. This request of \$22,000,000 represents an increase of 111% over the award amount for this contract.

BACKGROUND

The Posey/Webster Tubes consist of two separate reinforced concrete structures approximately 500 feet apart on Route 260 beneath the inner harbor in the Cities of Oakland and Alameda. The Posey Tube was constructed in 1927 and is 4,500 feet long, including the approach sections, cast-in-place and pre-cast immersed sections, and portal buildings housing the ventilation fans. At the lowest crossing under the estuary, the tube roadway is approximately 68 feet below sea level. The Posey Tube was completed in 1928 and the City of Oakland has designated it as a landmark. This project is considered to be the country's first seismic retrofit of a submerged highway tube.

The Webster Tube was constructed in the early 1960's and is of similar construction to the Posey Tube. It is nearly 4,400 feet long, including approach sections, cast-in-place and pre-cast immersed sections, and portal buildings housing ventilation fans. At the lowest crossing under the estuary, the tube roadway is approximately 71 feet below sea level.

The retrofit work is divided into three construction contracts. Stage I contract will retrofit the inside of the tubes by modifying the tube joints. This project began in March 2000 and is expected to continue through 2002. The second contract was a Demonstration Project to test the design and construction methods proposed for the Stage II outside tube retrofit. The Demonstration Project was completed in November 2000. The Stage II retrofit will densify the fill around the tubes to strengthen and stabilize the soil, which will reduce the potential for liquefaction of the tubes' foundation. The minimum criteria of this project is to meet a "No Loss of Life" level of performance for these tubes.

REASON FOR INCREASE

After the contract was awarded and the retrofit begun, it was quickly discovered that some of the work would be much more complicated than expected. The existing conditions at the tube joints, in particular, did not match the as-built drawings that the retrofit strategy was based on. The actual conditions made the work much more difficult and expensive. As more was learned about the condition of the joints and what work is required to retrofit them, the design committee decided to look again at the seismic retrofit strategy and review the previous decisions on what work was needed to meet the "No Loss of Life" goal. The committee has refined the original strategy to allow some of the most expensive work to be eliminated, but an additional \$22,000,000 is still needed to seismically retrofit these tubes so that they may withstand the maximum credible earthquake with no expected loss of life.

FUNDING OPTIONS

OPTION A: Approve this request as presented above for \$22,000,000 to allow completion of this project.

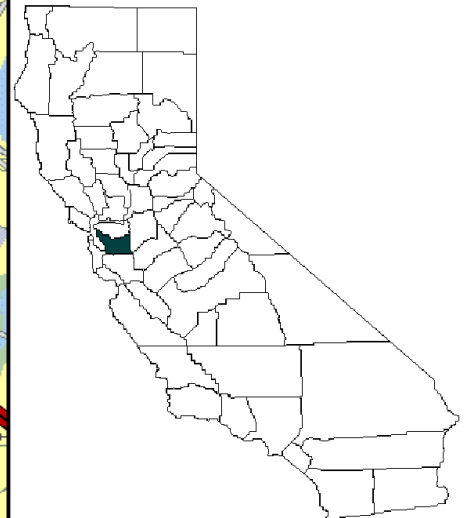
OPTION B: Deny this request and direct the Department to explore other options to complete this project.

The Department considered these options. Denial of this request will result in a significant delay in completing the retrofit of this heavily used highway facility. Some additional funds would be needed to close the exposed joints and to compensate the contractor for the unexpected work and associated delays. Option A is the lowest cost completion alternative that meets the “No Loss of Life” performance goal.

RECOMMENDED OPTION

The Department recommends that this request for \$22,000,000, as presented in Option A above, be approved to allow this project to be completed.

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description Reason for Supplemental Funds	EA PPNO Budget Year Item # Prgm Codes Program	State Federal Current Budget Amount	State Federal Additional Allocation	State Federal Revised Total Amount
4 \$9,253,000 Department of Transportation Alameda 04N-Ala-260	In Alameda and Oakland at Webster Street Tube and Posey Tube. Seismic Retrofit (Stage II), outside the tube work. Supplemental funds are needed for ongoing project.	440141 2001-02 301-0042 301-0890 SHOPP	 \$5,428,000 \$21,709,000 \$27,137,000	 \$1,852,000 \$7,401,000 \$9,253,000	 \$7,280,000 \$29,110,000 \$36,390,000



PROJECT DESCRIPTION

The project is located in Alameda County, in Alameda and Oakland, at Webster Street Tube and Posey Tube. The project will seismically retrofit Posey and Webster Street Tubes. This project is Stage II of the retrofit work.

FUNDING STATUS

The project was programmed in the 2000 SHOPP for \$22,887,000 for construction in the 2001/02 Fiscal Year. In July 2001, the CTC voted \$27,137,000 for the project. This request of \$9,253,000 represents an increase of 34% over the vote amount for this contract.

BACKGROUND

The Posey Tube, built in 1928, and the Webster Street Tube, built in 1963, were identified for seismic retrofit as part of the Seismic Retrofit Program. The Stage II retrofit will densify the fill around the tubes to strengthen the soil and to reduce the potential for liquefaction of the tubes' foundation. This

will stabilize the tubes during a major seismic event. The major work includes the installation of jet grout columns or stone columns adjacent to the tubes for almost the entire length of the tube segments.

REASON FOR INCREASE

There were three bidders on this contract. The contract bids were opened in February 2002 and the lowest bid was \$6,253,000 over the Engineer's Estimate. After reviewing the contract bids, most of the increase can be attributed to three items: jet grouting over land, stone column over land, and stone column over water. These items constitute approximately \$5,900,000 of the overage. Interviews with the bidders indicate that the cost reflects the condition that construction over water is more difficult with less access and more risk to workers.

An additional \$3,000,000 is requested for supplemental work on this contract to cover Removal and Disposal of Buried Man-Made Objects. These types of obstructions have been encountered on the two previous contracts (Stage I and Demonstration Project), and it is now anticipated that they will be encountered on this project as well. A total of \$9,253,000 is needed to award this project.

FUNDING OPTIONS

OPTION A: Approve this request as presented above for \$9,253,000 to allow this project to be awarded.

OPTION B: Deny this request and direct the Department to redesign the project for advertisement.

The Department considered these options. It does not appear that there are any revisions in the plans and specifications that would significantly lower the costs and still accomplish the purpose of the project.

RECOMMENDED OPTION

The Department recommends that this request for \$9,253,000, as presented in Option A above, be approved to allow this project to be completed.